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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,252	09/19/2003	David R. Jones IV	24935D	1138
22889	7590	07/10/2006	EXAMINER	
OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023			ADDIE, RAYMOND W	
			ART UNIT	PAPER NUMBER
			3671	

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/667,252	Applicant(s) JONES ET AL.	
	Examiner Raymond W. Addie	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19,22,43 and 44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 19, 22, 43, 44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 43, 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant's amendment to Claim 43 with respect to the "wherein statement" such that "wherein the mat in step (b) has a shrinkage resistance property". Does not define nor specify what property of the mat causes it to resist shrinkage. The fact the phrase "shrinkage resistance property" does not exist in the Specification; appears to indicate the Applicant did not have possession of the claimed invention at the time the application was filed, further raises possible 35 U.S.C. 112 1st paragraph issues because no specific property is cited in the Specification as providing a "shrinkage resistance property".

Hence, it is indefinite as to what property, if any causes the mat to exhibit "shrinkage resistance".

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19, 22, 43, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Shah et al. # 4,637,252 in view of Gallagher et al. # 5,869,413.

Shah et al. discloses a method of reinforcing a paved surface comprising the steps of:

Applying a layer of liquefied asphalt (unnumbered, disclosed as a tack coat in the form of AC-20 through AC-40) on a surface, such as an distressed, cracked old road surface.

Subsequently applying a reinforcement mat (unnumbered) over the cracked old road surface.

Applying a layer of paving material (unnumbered) over the reinforcement mat.

See col. 3, Ins. 8-14

Wherein said reinforcement mat comprises a layer of polymer fillers and non woven mineral fibers, such as glass fibers integrated together.

What Shah et al does not disclose is the use of polymer fibers.

However, Gallagher et al. '413 teaches it is old and well known to use a roadway reinforcing mat (34) having a mixture of polymer fibers and mineral fibers, such as glass and asphalt fibers to reinforce and waterproof a roadway. See Col. 2, Ins. 6-22.

Gallagher further teaches a method of improving a paved surface comprising the steps of: Applying a tack coat (118), such as liquefied asphalt, to a cracked roadway; Applying a mat on the surface; Applying a paving material over the mat.

Wherein the mat comprises a non-woven mat having a mixture of mineral and polymer fibers. The fibers having a melting point in the range of 270-500 degrees F, and preferably between 180-350 degrees F. See Col. 2.

Further wherein the asphalt fibers obviate the need to impregnate the mat in a "bath process", thus the mat being capable of absorbing the tack coat (118).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the method of reinforcing and water proofing a roadway of Shah et al, with the step of providing a reinforcement mat having both mineral and polymer fibers, as taught by Gallagher et al., in order to maximize the roadways resistance to moisture, corrosion and thermal flux, as reasonably suggested by Gallagher. See Gallagher '413 Col. 2, Ins. 5-34; Col. 9, Ins. 13-50; col. 10, In. 45-col. 11, In. 23.

With respect to Claims 22, 44 although Shah et al. does not disclose the melting point(temp.) of the mineral fibers; however both Shah et al., and Gallagher et al., recite the use of glass, fibers. Further, it is inherent that glass fibers have a melting point above 350⁰F. See Col. 3.

Response to Arguments

3. Applicant's arguments filed 6/21/06 have been fully considered but they are not persuasive. Applicant argues against the 35 U.S.C. 112 2nd paragraph rejection of claims 43 and 44 by suggesting "claims 19 and 43 have been amended to clarify that the recited phrases relative to the properties of the mat used in the method are not separate method steps...the properties of the mat used in the method are critical to the success of the method and therefore they impart patentable limitations to the claimed method...prior art neither teaches nor suggests using a mat having these properties in the recited surface paving method".

However, Claim 19 was not rejected under 35 U.S.C. 112, 2nd paragraph. With respect to claim 43 Applicant's amendment to the "wherein statement" such that "wherein the mat in step (b) has a shrinkage resistance property". Does not define nor specify what property of the mat causes it to resist shrinkage. As a matter of fact the phrase "shrinkage resistance property" does not exist in the Specification. Hence, it is indefinite as to what property, if any causes the mat to exhibit "shrinkage resistance".

The specification in paragraph [0037] explicitly states "A mat made with the blend of fibers is flexible and is resistant to shrinkage and melting". The blend of fibers comprising a variety of embodiments incorporating a wide variety of different types of fibers (polyester, nylon, glass, natural fibers, polypropylene and (PPS) to name a few.

Further, the specification clearly states in paragraph [0043] "this contrasts with a mat made from polypropylene which would have a significant amount of shrinkage".

Art Unit: 3671

Hence, it appears as though the only disclosure from the specification that supports a "shrinkage resistance property" is the Applicant's disclosure against a 100% polypropylene mat, and that limiting the amount of Polypropylene fibers in the mat, by blending a variety of fibers together to form the mat, limits the amount of shrinkage experienced by a 4 ounce sample held in an oven at 325 F.

Further, since the Specification in paragraph [0038] explicitly states "carpet fibers can be made from ANY FIBER-FORMING POLYMERSUITABLE FOR TEXTILE APPLICATIONS". Hence, it appears as though the exact combination of fibers (including scrap and reclaimed fibers) which do not appear to be sorted or segregated in any way; is not critical to the making or use of the mat, provided the amount of polypropylene fibers is kept to a minimum, thus reducing the affect of heat induced shrinkage.

With respect to Applicant's argument that "the properties of the mat used in the method are critical to the success of the method and therefore they impart patentable limitations to the claimed method...prior art neither teaches nor suggests using a mat having these properties in the recited surface paving method".

However, the performance of a 4 ounce sample in an oven at 325 degrees F for one minute, does not appear relevant to a reinforcement mat, typically 8'12' wide and several thousand feet long, that is applied to a tack coat of liquefied asphalt, which itself is known to be applied to a cracked roadway in the range of 25 degrees C or 77 degrees F, (as taught by Gallagher et al., Col. 11).

Art Unit: 3671

Applicant is reminded criticality is only persuasive when the specification makes it clear that the limitation is critical for the invention to function as intended. And that broad language in the disclosure, including the abstract, omitting an allegedly critical feature, tends to rebut the argument of criticality. See MPEP 2164.08c.

Since the claim of criticality does not specifically identify, where in the Specification, by page and line, the criticality of the 4 ounce samples performance in an oven, is critical to the functioning of the invention, the claim of criticality is not persuasive. See *Merk & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 UAPQ2d 1843. See *Minerals Separation, Ltd. v. Hyde*, 242 U.S. 261 (1916).

In this case, the distinction made is not a patentable one since, to be entitled to weight in method claims, the recited structural limitations (properties) therein must affect the method in a manipulative sense, and not amount to the mere claiming of a use of a particular structure. In this case, how a 4 ounce sample reacts in an oven at 325F for one minute, does not appear to affect the method in any manipulative sense, and only amounts to a broad description of a particular structural property. See *Ex parte Pfeiffer*, 1962 C.D. 408 (1961); *Ex parte Kangas*, 125 USPQ 419 (PTO Bd. App. 1960).

Further, *Gallagher et al.*, teaches forming reinforcing mats made of the same

materials claimed, wherein "Numerous reinforcement layers have been used for reinforcing highway systems. Such well known reinforcement layers include glass fibers in mat form, either woven or nonwoven, asphalt impregnated mats, mats of organic materials, such as polyester fibers, mats in the form of an open weave or grid, and layers of glass fibers or other reinforcement fibers."

Art Unit: 3671

Therefore, since the prior art teaches the use of a mat comprising the same materials claimed, it is obvious and well within the skill of one in the art, to realize the mat taught by the prior art, would have the same properties as the mat claimed.

Although Applicant argues " Specifically, Gallagher et al. does not disclose a mixture of mineral (glass) fibers and polymer fibers, but rather it discloses a mixture of glass fibers and asphalt fibers. The asphalt(fibers) can be modified with 2-30% polymer, but they are asphalt fibers not polymer fibers. The polymer fibers of the present invention are described as being polymer fibers, not asphalt fibers modified with a minor percentage of polymer". The argument is not consistent with the actual language of the claims. Applicant is thus reminded, that Gallagher et al. includes additional structure not required by Applicant's invention, it must be noted that Gallagher et al., discloses the invention as claimed. The fact that it discloses additional structure not claimed is irrelevant.

Still further, Gallagher et al. explicitly recites "while asphalt itself has many beneficial properties, it lacks inherent tensile strength and integrity.

Therefore many asphalt products are reinforced with such materials as glass fibers or organic fibers such as polymer fibers".

Hence, it is well known to reinforce glass fiber mats with polymer fibers for use in repairing roadways. Therefore, the arguments are not persuasive.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

It is noted the Last Office Action, in paragraph 4 the pending claims were rejected as unpatentable over Gnesa in view of Gallagher et al.; but the body of the rejection cited Shah et al., cited by Applicant on 9/19/2003, and includes specific reference to column and line of the disclosure of Shah et al.

Therefore, the rejection has been corrected to cite the proper primary reference to Shah et al., and does not constitute a New Grounds of Rejection.


Further, since Applicant has long had possession of the Shah et al. '946 reference, the rejection as put forth above appears to be in proper form for a final rejection, thus restarting the Applicant's period to respond.

Still further, the amendment filed 6/21/06 has been entered.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 571 272-6986. The examiner can normally be reached on 6AM-2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Raymond Addie
Primary Examiner
Group 3600

7/6/06